

- 1 -

piece 1, NC\_000913, yhhX\_ryhB+, config: linear, direction: +, begin: 3578799, end: 3578965

Sequence logo showing the conservation of amino acids at each position of the peptide sequence. The x-axis represents the positions, and the y-axis shows the frequency of amino acids: Glu (red), Ala (blue), Lys (green), Ser (orange), Asn (purple), Pro (pink), Ile (yellow), Tyr (teal), Val (light blue), Leu (light green), Asp (dark red), Met (dark blue), His (dark green), Arg (dark purple), and Cys (dark pink). Red dots indicate positions where the most frequent amino acid is Glu.

[###> orf 15 codon

1 NC\_000913.vhhX ir yhhX\_ryhB+

The diagram illustrates the *yhhX-ryhB* operon. It features two promoters: a green dashed box labeled 'sd' and a red dashed box. The *yhhX* gene is transcribed by a green arrow, and the *ryhB* gene is transcribed by a red arrow. A blue bracket indicates a processing site between the two genes. A yellow box highlights a sequence motif 'UUTT'.

```
[-----] sd-(9)-ir 3578821 Gap 2.3 bits  
[-----] sd-ir 3578821 yhhX_ryhB+ total 10.0 bits  
[-----] sd-(15)-ir 3578827 Gap 6.0 bits  
[-----] sd-ir 3578827 yhhX_ryhB+ total 5.6 bits
```

DNA sequence diagram showing the codon for proline (CCC) and the start site (asterisk).